

Please delete and replace the paragraph at page 5, line 21 to page 6, line 3, to read as follows:

AX  
Examples of useful "d" elements include Mo (1.8), Re (1.9), Fe (1.8), Ru (2.2), Os (2.2), Co (1.8), Rh (2.2), Ir (2.2), Ni (1.8), Pd (2.2), Pt (2.2), Cu (1.9), Ag (1.9), Au (2.4), Hg (1.9), B (2.0), Tl (1.8), Si (1.8), Ge (1.8), P (2.1), As (2.0), Sb (1.9), Se (2.4) and Te (2.1), wherein numerical values given in parentheses indicate publicly available Pauling electronegativity values.

In the Claims:

Please cancel claims 1 to 36 and enter new claims 37 to 70 as follows.

AX  
1 37. (new) An organic electroluminescent device having a  
2 luminescent material containing layer interposed between a  
3 positive electrode and a negative electrode for supplying  
4 an electrical energy to said luminescent material for  
5 emitting light upon receipt of said electrical energy, said  
6 negative electrode containing f and p elements wherein:

7 said f-element is at least one element selected from  
8 the group consisting of Be, Ti, V, Cr, Mn, Zr, Nb, La, Ce,  
9 Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, Tm, Lu, Hf and Ta, and  
10 wherein

11 said p-element is at least one element selected from  
12 the group consisting of H, B, C, N, O, F, Al, Si, P, S, Cl,  
13 Ga, Ge, As, Se, Br, In, Sb, Te, I, Tl, Zn, Cd and Hg.

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1 38. (new) The organic electroluminescent device of claim 37,  
2 wherein said luminescent material containing layer  
3 comprises at least a host, as a principal component, and a  
4 fluorescent dopant, and wherein a molar mass ratio of a  
5 molecule of said dopant to a molecule of said host  
6 (dopant/host) is in the range of 0.344 to 2.90.

1 39. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, Pr, Nd, Sm, Gd, Tb,  
4 Dy, Ho, Er, Tm, and Lu.

1 40. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, Pr, Nd, Sm, Gd, Tb,  
4 Dy, Ho, and Er.

1 41. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, and Pr.

1 42. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of Ce, Pr, Nd, Gd, Tb, Dy, Ho, Er  
4 and Lu.

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1 43. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of Sm and Tm.

1 44. (new) The organic electroluminescent device of claim 37,  
2 wherein said f-element is at least one element selected  
3 from Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, Tm and Lu.

1 45. (new) The organic electroluminescent device of claim 37,  
2 wherein said p-element is at least one element selected  
3 from the group consisting of Zn, B, Al, In, Tl, Si, Ge, P,  
4 Sb, S, Se and Te.

1 46. (new) The organic electroluminescent device of claim 37,  
2 wherein a mean electronegativity value  $E_{ave}$  of said negative  
3 electrode is in the range of 1.50 - 1.91, relative to an  
4 electronegativity value of 1.15 of a lanthanoid element,  
5 wherein said mean electronegativity value is calculated by  
6 weighting an electronegativity value of each negative  
7 electrode constituting f- and p-element by a proportion of  
8 a number of atoms of the respective f- and p-element  
9 present in the negative electrode.

1 47. (new) The organic electroluminescent device of claim 46,  
2 wherein said lanthanoid element is Ce.

1 48. (new) The organic electroluminescent device of claim 37,  
2 wherein said device has an emission efficiency of at least

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10.0 cd/A when said device is operated by a flow of a DC current to emit light with a controlled luminance of 100 cd/m<sup>2</sup>, said emission efficiency being calculated by dividing said luminance by a current density.

49. (new) An organic electroluminescent device having a luminescent material containing layer interposed between a positive electrode and a negative electrode for supplying electrical energy to said luminescent material for emitting light upon receipt of said electrical energy, said negative electrode containing f-, p-, and d-element wherein:

said f-element is at least one element selected from the group consisting of Be, Ti, V, Cr, Mn, Zr, Nb, La, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, Tm, Lu, Hf and Ta;

said p-element is at least one element selected from the group consisting of H, B, C, N, O, F, Al, Si, P, S, Cl, Ga, Ge, As, Se, Br, In, Sb, Te, I, Tl, Zn, Cd and Hg, and

said d-element is at least one element selected from the group consisting of Mo, Re, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Hg, B, Tl, Si, Ge, P, As, Sb, Se and Te and wherein said d-element is excluded from the selection of said f- or p-element.

50. (new) The organic electroluminescent device of claim 49, wherein said luminescent material containing layer comprises at least a host, as a principal component, and a fluorescent dopant, and wherein a molar mass ratio of a

5 molecule of said dopant to a molecule of said host  
6 (dopant/host) is in the range of 0.344 to 2.90.

1 51. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, Pr, Nd, Sm, Gd, Tb,  
4 Dy, Ho, Er, Tm, and Lu.

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Acm  
1 52. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, Pr, Nd, Sm, Gd, Tb,  
4 Dy, Ho, and Er.

1 53. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of La, Ce, and Pr.

1 54. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of Ce, Pr, Nd, Gd, Tb, Dy, Ho, Er  
4 and Lu.

1 55. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from the group consisting of Sm and Tm.

1 56. (new) The organic electroluminescent device of claim 49,  
2 wherein said f-element is at least one element selected  
3 from Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, Tm and Lu.

1 57. (new) The organic electroluminescent device of claim 49,  
2 wherein said p-element is at least one element selected  
3 from the group consisting of Zn, B, Al, In, Tl, Si, Ge, P,  
4 Sb, S, Se and Te.

1 58. (new) The organic electroluminescent device of claim 49,  
2 wherein said d-element is at least one element selected  
3 from the group consisting of Fe, Ru, Co, Rh, Ir, Ni, Pd,  
4 Pt, Cu, Ag and Au.

1 59. (new) The organic electroluminescent device of claim 49,  
2 wherein said p-element is Al and said d-element is at least  
3 one element selected from the group consisting of Co, Ni,  
4 Cu and Ag.

1 60. (new) The organic electroluminescent device of claim 49,  
2 wherein said p-element is Sb and said d-element is at least  
3 one element selected from Ag, Cu, Au and Al.

1 61. (new) The organic electroluminescent device of claim 49,  
2 wherein a mean electronegativity value  $E_{ave}$  of said negative  
3 electrode is in the range of 1.50 - 1.91, relative to an  
4 electronegativity value of 1.15 of a lanthanoid element,  
5 wherein said mean electronegativity value is calculated by

weighting an electronegativity value of each negative electrode constituting f- and p-element by a proportion of a number of atoms of the respective f- and p-element present in the negative electrode.

62. (new) The organic electroluminescent device of claim 61, wherein said lanthanoid element is Ce.

63. (new) The organic electroluminescent device of claim 49, wherein said device has an emission efficiency of at least 10.0 cd/A when said device is operated by a flow of a DC current to emit light with a controlled luminance of 100 cd/m<sup>2</sup>, said emission efficiency being calculated by dividing said luminance by a current density.

64. (new) An organic electroluminescent device having a luminescent material-containing layer interposed between a positive electrode and a negative electrode for supplying an electrical energy to said luminescent material for emitting light upon receipt of said electrical energy, said negative electrode containing f- and p- elements wherein:

said f-element is at least one element selected from the group consisting of La, Ce, Eu and Yb; wherein

said p-element is at least one element selected from the group consisting of Zn, Al, Sn and Sb, and wherein

said negative electrode comprises a first layer closest to said luminescent material-containing layer, a second layer overlying said first layer and a third layer

14 overlying said second layer, and wherein said first layer  
15 is made of at least one of said f-element, wherein said  
16 second layer is made of a mixture or compound of at least  
17 one each of said f- and p-elements and said third layer is  
18 made of at least one of said p-element.

1 65. (new) The organic electroluminescent device of claim 64,  
2 wherein said f-element is Ce and said p-element is Al.

1 66. (new) The organic electroluminescent device of claim 64,  
2 wherein said second layer has such a composition gradient  
3 in its thickness direction toward its interface with the  
4 third layer from its interface with the first layer, that  
5 a content of said f-element in said second layer decreases  
6 while a content of said p-element increases in said  
7 thickness direction of said second layer.

1 67. (new) The organic electroluminescent device of claim 64,  
2 wherein at least one of said first, second and third layers  
3 of said negative electrode contain an additional element  
4 different from the constituent element thereof.

1 68. (new) An organic electroluminescent device having a  
2 luminescent material-containing layer interposed between a  
3 positive electrode and a negative electrode for supplying  
4 an electrical energy to the luminescent material for  
5 emitting light upon receipt of said electrical energy, said  
6 negative electrode containing f- and p-elements wherein:



7           said f-element is at least one element selected from  
8           the group consisting of elements those having  
9           electronegativity values higher than that of calcium and  
10          equal to or lower than that of vanadium; and

11          said p-element is at least one element selected from  
12          the group consisting of elements having electronegativity  
13          values equal to or higher than that of aluminum; and

14          wherein said negative electrode comprises a first  
15          layer closest to said luminescent material-containing  
16          layer, a second layer overlying said first layer and a  
17          third layer overlying said second layer, and wherein said  
18          first layer is made of at least one of said f-element, said  
19          second layer is made of a mixture or compound of at least  
20          one each of said f- and p-elements and said third layer is  
21          made of at least one of said p-element.

1       69. (new) The organic electroluminescent device of claim 68,  
2       wherein said second layer has such a composition gradient  
3       in its thickness direction toward its interface with the  
4       third layer from its interface with the first layer, that  
5       a content of said f-element in said second layer decreases  
6       while a content of said p-element increases in said  
7       thickness direction of said second layer.

1       70. (new) The organic electroluminescent device of claim 68,  
2       wherein at least one of said first, second and third layers  
3       of said negative electrode contain an additional element  
4       different from the constituent element thereof.